

## REMARKS

Claims 1-23, 75-79, 155-172, 187, 188 and 240-243 are now pending in the application. The Examiner is respectfully requested to reconsider and withdraw the rejections in view of the amendments and remarks contained herein.

Applicant would like to thank the Examiner for courtesy extended during the interview on November 16, 2007. An agreement was not reached.

## REJECTION UNDER 35 U.S.C. § 103

Claims 1, 3-23, 75, 77-97, 187-188 and 240-243 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Li et al. (U.S. Pat. No. 6,853,568) in combination with Riggio et al. (U.S. Pat. No. 6,493,242) and further in combination with Wittenbreder, Jr. (U.S. Pat. No. 5,402,329).

Claims 2, 76 and 155-172 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Li et al. (U.S. Pat. No. 6,853,568) in combination with Riggio et al. (U.S. Pat. No. 6,493,242) and further in combination with Wittenbreder (U.S. Patent No. 6,822,427) and A.F. Podell (U.S. Pat. No. 3,529,233). These rejections are respectfully traversed.

Applicant respectfully submits that the combination of Li in view of Riggio and Wittenbreder is improper.

As best understood by Applicant, the Examiner asserts that Fig. 1 of Li (illustrated below) includes two conducting switches 112, 115 two conductors 114, 117 and two freewheeling switches 113, 116. However, as is evident in Fig. 1 of Li and the related disclosure, **the two inductors are not wound around a common core.**

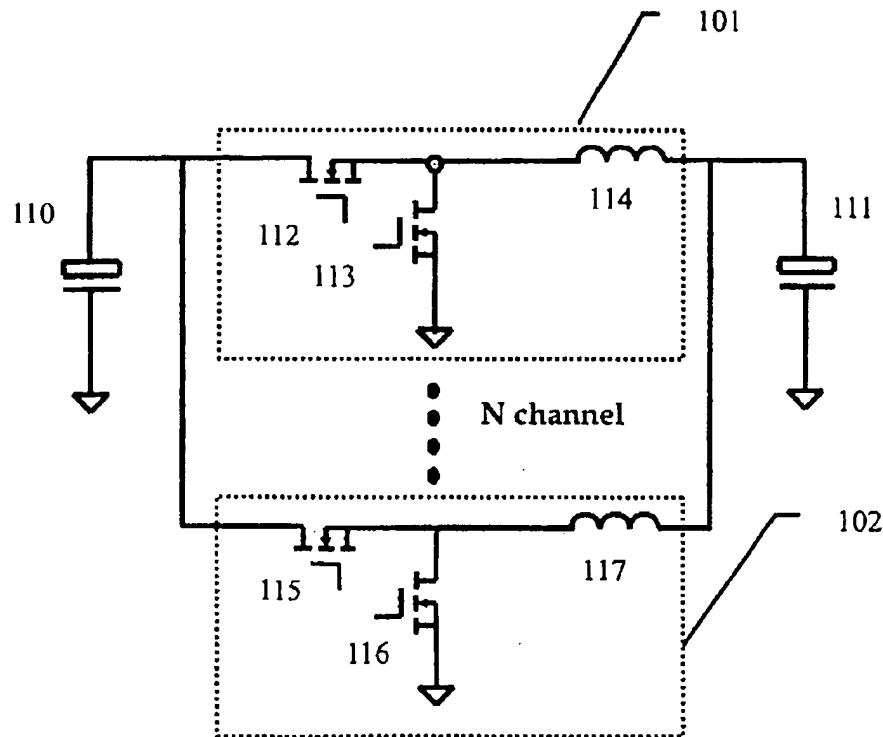
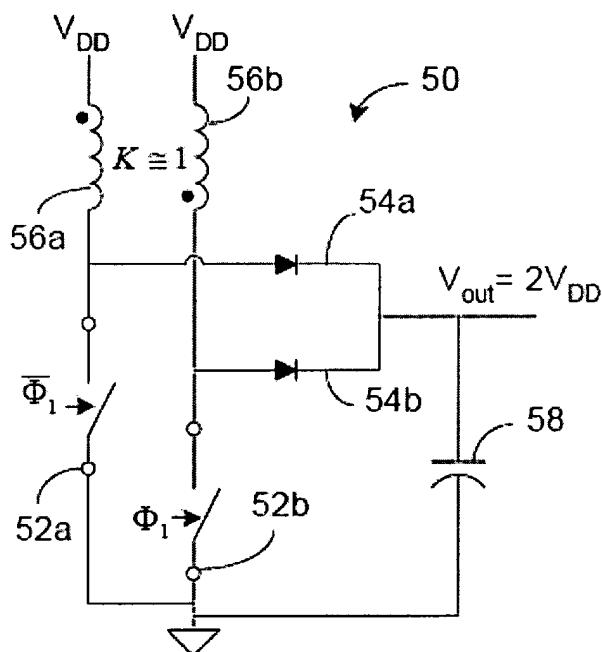


Fig. 1(PRIOR ART)

Instead, Li describes the inductors 114, 117 as output inductors that are connected in parallel and that provide output for the respective power control system. Each of N parallel channels includes an inductor (such as inductors 114, 117) that is connected to a common output. Were the inductors 114, 117 to be wound together as the Examiner proposes, the N channels would then be mutually transferring energy between themselves instead of providing the common output. In other words, Li does not show, teach or suggest that there is mutual inductance between inductors 114, 117 and instead includes uses inductors 114, 117 to provide a parallel inductor output response.

In contrast, the two inductors 56a, 56b of Claim 1 are wound together on a common core, as illustrated by Fig. 3B of the Application thereby providing a mutual

inductance. The inductors 56a, 56b are also in communication with the two conduction switches 52a, 52b that are likewise in communication with two freewheeling switches 54a, 54b.



## FIG. 3B

Riggio, as best understood by Applicant, fails to cure the deficiencies of Li. The Examiner includes Riggio to demonstrate a drive circuit having a duty cycle of 50% and not to show the switch inductor configuration as in Claim 1. Riggio merely includes a single switch controlled by a drive circuit that periodically provides control for an inductor. Riggio does not show, teach or suggest that two conductive switches communicate with two inductors that are wound together on a common core. Riggio also does not include two freewheeling switches that communicate with the two conductive switches nor suggests these switches would be in any way beneficial.

Wittenbreder, as best understood by Applicant, fails to cure the deficiencies of Li and Riggio. The Examiner asserts that Wittenbreder demonstrates common core conductors that mutually cancel DC currents and that have a coefficient of coupling equal to one. Wittenbreder does not show, teach or suggest that two conductive switches communicate with the inductors. Wittenbreder also does not include two freewheeling switches that communicate with the two conductive switches.

Even if Wittenbreder and Riggio include the wound conductive cores as asserted by the Examiner, it makes no sense to combine the wound cores of Wittenbreder and Riggio with the parallel channels of Li.

A reference must be considered for all that it teaches including disclosures that point towards the invention and disclosures that teach away from the invention. In re Dow, 5 USPQ.2d 1529 (Fed. Cir. 1988). It is improper to take teachings in the prior art out of context and give them meanings that they would not have to those skilled in the art. In re Wright, 9 USPQ.2d 1649 (Fed. Cir 1989). It is impermissible to pick and choose from a reference on so much of it as will support a given position to the exclusion of other parts necessary to the full appreciation of what the reference fairly teaches to one skilled in the art. Bausch & Lomb, Inc. v. Barnes-Hind, Inc., 230 USPQ 416 (Fed. Circ. 1986).

Li does not include two conductive switches that communicate with two respective freewheeling switches and two respective inductors that are wound together. To the extent that Li includes conductive and freewheeling switches, Li includes the switches in parallel output paths and connects the paths to a common output. Each path includes an inductor, but the inductors are not wound together. If instead the

inductors were wound together as suggested by the Examiner, the parallel path output characteristics that are desired in Li would not be achieved. Riggio and Wittenbreder merely teach common power systems that include wound magnetic cores. Regardless of the features of those wound magnetic cores, Li would not be benefitted or suitable in any way for the proposed combination.

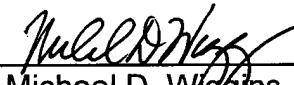
Therefore, Claim 1 is allowable for at least the above reasons. Claims 75, 155, and 164 are allowable for at least similar reasons as Claim 1. Claims 2-23, 76-97, 156-163, 165-172, 187-188, and 240-243 ultimately depend from Claims 1, 75, 155, and 164 and are allowable for at least similar reasons.

CONCLUSION

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office Action and the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (248) 641-1600.

Respectfully submitted,

Dated: December 12, 2007

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